

User guide: National Cost Collection 2018/19

A guide to using the data

NHS England and NHS Improvement



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Introduction

This document supplements the publication of the 20118/19 national cost collection by providing technical guidance to anyone wishing to analyse the data.

It includes:

- examples to illustrate how the data might be used to investigate costs across the NHS (Chapter 1)
- instructions on setting up standard queries to support analysis of the data (Chapter 2).

Chapter 3 describes the source data submitted by trusts. We have published this data in a series of comma separate variable (CSV) files which can be downloaded from the <u>National Cost Collection page</u> on the NHS Improvement website.

We have also published the source data submitted by trusts in the reconciliation statement. This return provides assurance that trusts have correctly included all costs, identified excluded services, and netted off allowable income from their costs quantum. It also provides information on the costs of certain high cost drugs and devices and other memorandum information. Again, this can be downloaded from the <u>National Cost Collection page</u> on the NHS Improvement website.

In a change to previous years we are now obliged to follow NHS Digitals disclosure control rules for any data that they collect on our behalf. This year they were our collection partner for all the acute PLICS data, as this makes up over half of the cost data collected this year, we have made the decision to apply their disclosure control principles to all of the national cost collection data.

This means that in the sources data, which is provided at an organisation>department>service code>currency level, where the activity count is less than 8 the actual figure has been replaced with a '*'. The row of data will still be available with the costs shown so you are able to reconcile to a full national quantum of costs using the source data.

1: Analysing the costs of NHS services

This section contains four examples to illustrate how the reference cost data can be used to analyse and investigate costs across the NHS.

Example 1: Calculating average costs – normal delivery of a baby in an inpatient setting

To determine the average cost for the normal delivery of a baby in an inpatient setting, the first step is to identify the relevant HRGs (Table 1).

Table 1: Normal delivery HRGs

HRG	Description
NZ30A	Normal Delivery with CC Score 2+
NZ30B	Normal Delivery with CC Score 1
NZ30C	Normal Delivery with CC Score 0
NZ31A	Normal Delivery, with Epidural or Induction, with CC Score 2+
NZ31B	Normal Delivery, with Epidural or Induction, with CC Score 1
NZ31C	Normal Delivery, with Epidural or Induction, with CC Score 0
NZ32A	Normal Delivery, with Epidural and Induction, or with Post-Partum Surgical Intervention, with CC Score 2+
NZ32B	Normal Delivery, with Epidural and Induction, or with Post-Partum Surgical Intervention, with CC Score 1
NZ32C	Normal Delivery, with Epidural and Induction, or with Post-Partum Surgical Intervention, with CC Score 0
NZ33A	Normal Delivery, with Epidural or Induction, and with Post-Partum Surgical Intervention, with CC Score 2+
NZ33B	Normal Delivery, with Epidural or Induction, and with Post-Partum Surgical Intervention, with CC Score 1

HRG	Description
NZ33C	Normal Delivery, with Epidural or Induction, and with Post-Partum Surgical Intervention, with CC Score 0
NZ34A	Normal Delivery, with Epidural, Induction and Post-Partum Surgical Intervention, with CC Score 2+
NZ34B	Normal Delivery, with Epidural, Induction and Post-Partum Surgical Intervention, with CC Score 1
NZ34C	Normal Delivery, with Epidural, Induction and Post-Partum Surgical Intervention, with CC Score 0

The second step is to identify a weighted average cost from the total activity and costs across the required settings (Table 2).

Table 2: Calculating the average cost of a normal delivery

	Α	В	С	D = A*C
Setting	Activity	FCEs	National average unit cost (£)	Total cost: activity × unit cost (£)
Non-Elective Inpatient – Long Stay	151,713	151,713	3,276	497,016,647
Non-Elective Inpatient – Short Stay	207,317	207,317	1,670	346,122,456
Total	-	359,030	2,348	843,139,103

The national average unit cost of an inpatient normal delivery is £2,348. Note that these costs relate to the delivery episode itself and no additional costs are incurred for a healthy baby. If the baby requires healthcare in its own right, then this becomes a separate episode with its own costs. These figures also do not represent all the costs to the NHS of a birth, which will also include the costs of home births and other events such as GP consultations, and antenatal and postnatal outpatient attendances.

Example 2: Using the code-to-group – coeliac disease

<u>Hospital episode statistics</u> (HES) are collected by individual diagnoses or procedures. Reference costs are not.

However, the <u>code-to-group workbook</u>, published by NHS Digital, can be used to understand how HRGs are derived from a given set of ICD-10 codes for diagnoses and OPCS-4 codes for procedures. Caution is needed when using such an approach to estimate the costs of a particular diagnosis or procedure. The precise grouping to HRGs depends on other ICD-10 and OPCS-4 codes and patient characteristics (eg age, length of stay, complications and co-morbidities) present in the episode of care, and the resulting costs would be affected by other diagnoses and procedures in the HRG.

For example, the costs associated with coeliac disease (ICD-10 code K900) are included in one of the HRGs for non-malignant gastrointestinal tract disorders with an HRG root code of FD10 and splits dependent on length of stay and complications or co-morbidities. Once the required HRGs have been identified, the method described in Example 1 can be followed to obtain the average cost for this and clinically similar disorders.

Example 3: Comparing costs over time – cholecystectomy

To examine the difference between the day case and elective inpatient costs of performing a cholecystectomy (gall bladder removal) between 2005/06 and 2018/19, the first step is again to identify the relevant HRGs. However, a complicating factor when comparing reference costs between years, especially over an extended period, is that they have been collected on different versions of HRGs. Tables 3 to 6 illustrate the changes for cholecystectomy.

Table 3: Cholecystectomy HRGs under HRGv3.5 in 2005/06 reference costs

HRG	Description		
G13	Cholecystectomy >69 or with CC	Table	4: Cholecystectomy HRGs under
G14	Cholecystectomy <70 without CC	HRG ² costs	in 2006/07 to 2008/09 reference

HRG	Description
GA10A	Cholecystectomy with CC

GA10B Cholecystectomy without CC

Table 5: Cholecystectomy HRGs under HRG4 in 2009/10 to 2011/12 reference costs

HRG	Description
GA10C	Open cholecystectomy without CC
GA10D	Laparoscopic cholecystectomy with length of stay 1 day or more without CC
GA10E	Laparoscopic cholecystectomy with length of stay 0 days without CC
GA10F	Open or laparoscopic cholecystectomy with CC

Table 6: Cholecystectomy HRGs under HRG4+ in 2012/13 to 2018/1 reference costs (national cost collection in 2018/19)

HRG	Description
GA10G	Open or Laparoscopic, Cholecystectomy, 18 years and under
GA10H	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 4+
GA10J	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 1–3
GA10K	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 0
GA10L	Open Cholecystectomy, 19 years and over, with CC Score 3+
GA10M	Open Cholecystectomy, 19 years and over, with CC Score 1–2
GA10N	Open Cholecystectomy, 19 years and over, with CC Score 0

Once the required HRGs for each year have been identified, the method described in Example 1 can be followed to obtain the required average cost.

Example 4: Comparing costs between trusts – normal delivery

Table 1 showed the national average unit cost for the normal delivery HRGs across all trusts. It is possible to undertake a more detailed organisation-level analysis using the source data available to download from the <u>National Cost Collection page</u> on the NHS Improvement website.

Figure 1 shows the trust-level data for a normal delivery with complications and comorbidities score 2+ (NZ30A) in obstetrics (TFC 501) in a non-elective inpatient (long stay) setting. The national average unit cost is £3,063 but this figure shows the range of costs across trusts.



Figure 1: Inlier unit costs for Normal Delivery with CC Score 2+, TFC 501, Non-Elective Inpatient – Long Stay.

2: Analysis by trust, setting, service and currency

This chapter outlines the standard queries to support analysis of the data. Users should first import the CSV files into Microsoft Access. The notes that follow are based on Microsoft Access 2010. The process for other versions may differ slightly. Only the files "1 - Data.csv" and "1 - Data MFF.csv" are required for running these queries. The MFF-adjusted data is used for reference cost index (RCI)-related queries, while the unadjusted data is used for the remaining queries.

Importing the data

The following process will need to be completed twice to ensure that both the "1 - Data.csv" and "1 - Data MFF.csv" files are imported.

To import the data into Microsoft Access, first navigate to the 'Import & Link' section of the 'External Data' tab and click 'Text file'.



A dialogue box will appear. Click 'Browse', navigate to where you have saved the .CSV files and select the one you wish to use. Ensure that the option 'Import the source data into a new table in the current database' is selected. Then click 'OK'.

Get External Data - Text File	?	x
Select the source and destination of the data		
Specify the source of the data.		
Elle name: G:\Performance Insight\Reference Costs\Reference Costing 2017-18\Data\Publication\1 - Data.csv	B <u>r</u> owse	
 Specify how and where you want to store the data in the current database. Import the source data into a new table in the current database. If the specified table does not exist, Access will create it. If the specified table already exists, Access might overwrite its with the imported data. Changes made to the source data will not be reflected in the database. Append a copy of the records to the table: Table 1 If the specified table exists, Access will add the records to the table. If the table does not exist, Access will create it. Ch to the source data will not be reflected in the database. Link to the data source by creating a linked table. Access will create a table that will maintain a link to the source data. You cannot change or delete data that is linked to a However, you can add new records. 	anges mad	ie
OK	Cancel	

The 'Import Text Wizard' will then open. Ensure that the option 'Delimited -Characters such as comma or tab separate each field' is selected.

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Sample data from file: G:\PEREORMANCE INSIGHT\REFERENCE COSTS\REFERENCE COSTING 2017-18\DATA\PURI (CATION\1 - DATA CSV	
1 brg Code, Dept Code, Service Code, Currency Code, Unit cost, Activity, Bed days, Mean, Actual	
2 R0A, AE, T01A, VB01Z, 581, 56, 22, 0, 399, 458142396561, 12794, 32, 8788, 07913272434, 11 A&E, 0	
3 R1F, AE, T01A, VB01Z, 321.22, 41, 0, 399.458142396561, 13170.02, 16377.783838259, 11 A4E, 0	
4 R1H, AE, T01A, VB01Z, 696.79, 170, 0, 399.458142396561, 118454.3, 67907.8842074154, 11 A&E, 0	
5 R1K, AE, T01A, VB01Z, 636.04, 4, 0, 399.458142396561, 2544.16, 1597.83256958624, 11 A&E, 0	
6 RA2, AE, T01A, VB01Z, 1087.9,8,0,399.458142396561,8703.2,3195.66513917249,11 A&E,0	
7 RA3, AE, T01A, VB01Z, 674.79, 1, 0, 399.458142396561, 674.79, 399.458142396561, 11 A&E, 0	
8 RA4, AE, T01A, VB01Z, 260.28, 8, 0, 399.458142396561, 2082.24, 3195.66513917249, 11 A&E, 0	
9 RA7, AE, T01A, VB01Z, 522.01, 31, 0, 399.458142396561, 16182.31, 12383.2024142934, 11_A&E, 0	
10RAE,AE,T01A,VB01Z,387.4,15,0,399.458142396561,5811,5991.87213594841,11_A&E,0	
11RAJ,AE,T01A,VB01Z,686.29,48,0,399.458142396561,32941.92,19173.9908350349,11_A&E,0	
12RAL,AE,T01A,VB01Z,388.2,52,0,399.458142396561,20186.4,20771.8234046212,11_A&E,0	
13RAP,AE,T01A,VB01Z,375.64,25,0,399.458142396561,9391,9986.45355991402,11_A&E,0	
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R1K		AE	T01A	VB01Z		636.04	4	0	399.4581423965	
RA2		AE	T01A	VB01Z		1087.9	8	0	399.4581423965	
RA3		AE	T01A	VB01Z		674.79	1	0	399.4581423965	
RA4		AE	T01A	VB01Z		260.28	8	0	399.4581423965	
RA7		AE	TO1A	VB01Z		522.01	31	0	399.4581423965	
RAE		AE	T01A	VB01Z		387.4	15	0	399.4581423965	
RAJ		AE	T01A	VB01Z		686.29	48	0	399.4581423965	
RAL		AE	T01A	VB01Z		388.2	52	0	399.4581423965	
RAP		AE	T01A	VB01Z		375.64	25	0	399.4581423965	
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At the next window, **ensure that MS Access recognises the 'Service Code' field as text**. To do this select the 'Service Code' field by clicking on the field name and then select 'Text' in the 'Data Type' box.

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1H	AE	TO1A	VB01Z	696.79	170	0	399.4581423965
1K	AE	TO1A	VB01Z	636.04	4	o	399.4581423965
A2	AE	TO1A	VB01Z	1087.9	8	0	399.4581423965
A3	AE	TO1A	VB01Z	674.79	1	0	399.4581423965
A4	AE	TO1A	VB01Z	260.28	8	0	399.4581423965
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AE	AE	TO1A	VB01Z	387.4	15	0	399.4581423965
AJ	AE	TO1A	VB01Z	686.29	48	o	399.4581423965
AL	AE	TO1A	VB01Z	388.2	52	o	399.4581423965
AP	AE	TO1A	VB01Z	375.64	25	0	399.4581423965
AX	AE	TO1A	VB01Z	338.76	19	0	399.4581423965
BA	AE	TO1A	VB01Z	641.72	48	0	399.4581423965

At the next window, click 'Next'. The following window will ask whether you wish to select a primary key. Select the option 'No primary key' and click 'Next'.

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RA4	AL	TOTA	VBUIZ	260.28	8	0	399.4581423965		
RA7	AL	TOTA	VB012	522.01	51	0	399.4581423965		
RAL	AL	TOTA	VBUIZ	507.4	15	0	399.4581423965		
RAJ	AL	TOTA	VBUIZ	686.29	48	0	399.4581423965		
RAL	AL	TOTA	VBUIZ	388.2	52	0	399.4581423965		
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The final window of the Import Text Wizard will then appear. Click 'Finish', making sure not to change the name of the table the data will be imported to.

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	That's all the information the wizard needs to import your data.
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The first set of data has now been imported. Return to the start of this chapter and repeat the process to ensure that both the "1 - Data.csv" and "1 - Data MFF.csv" files are imported.

Creating standard queries

This process creates the standard queries that allow organisations to compare their data against the national averages and to calculate the RCIs. Users can create other queries, as required.

Having imported the CSV files into a Microsoft Access database, click 'Create' and then 'Query Design'.



A Show Table window will pop up. Click 'Close'.

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Click 'View' in the top left-hand corner and choose 'SQL View'.

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A new window will appear.

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Paste the SQL text for query '01 By Org and RCI pot' in the first row of Table 7 (see below) into the window.



Close the window.

A new window will appear. Click 'Yes'.

Microsoft	Access 🔀	
<u> </u>	Do you want to save changes to the design of query 'Query1'?	
	Yes No Cancel	

A new window will appear. Type in the query name as listed in Table 7 (ie '01 By Org and RCI pot'), then click 'OK'.

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D1 By Org and RCI pot		
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Repeat this process for all the queries listed in Table 7.

Table 7: SQL queries

Query name	SQL text – RCI-related queries				
01 By Org and NCCI pot	SELECT [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], Sum(Round([MFFd Actual Cost],0)) AS [Actual cost], Sum(Round([MFFd Expected cost],0)) AS [Expected cost], Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0) AS [Cost variance], Round(Sum([MFFd Actual cost])/Sum([MFFD Expected cost])*100,2) AS RCI FROM [1 - Data MFF] GROUP BY [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot] HAVING (([1 - Data MFF].[Org code])=[Enter Org code]) ORDER BY Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0);				
02 By Org, NCCI pot, Dept	SELECT [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code] AS Expr1, Sum(Round([MFFd Actual Cost],0)) AS [Actual cost], Sum(Round([MFFd Expected cost],0)) AS [Expected cost], Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0) AS [Cost variance], Round(Sum([MFFd Actual cost])/Sum([MFFd Expected cost])*100,2) AS RCI FROM [1 - Data MFF] GROUP BY [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code] HAVING ((([1 - Data MFF].[Org code])=[Enter Org code]) AND (([1 - Data MFF].[Mapping pot])=[Enter Mapping pot - 01_EI, 02_NEI, 04_CCS, 05_OP, 06_OAS, 07_Com, 08_MH, 09_Trans, 10_PAR, 11_A&E, 12_UB, 13_Excl])) ORDER BY Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0);				

Query name	SQL text – RCI-related queries
03 By Org, NCCI pot, Dept and Service	SELECT [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code] AS Expr1, [1 - Data MFF].[Service code], Sum(Round([MFFd Actual Cost],0)) AS [Actual cost], Sum(Round([MFFd Expected cost],0)) AS [Expected cost], Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0) AS [Cost variance], Round(Sum([MFFd Actual cost])/Sum([MFFd Expected cost])*100,2) AS RCI FROM [1 - Data MFF] GROUP BY [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code], [1 - Data MFF].[Service code] HAVING ((([1 - Data MFF].[Org code])=[Enter Org code]) AND (([1 - Data MFF].[Mapping pot])=[Enter Mapping pot - 01_EI, 02_NEI, 04_CCS, 05_OP, 06_OAS, 07_Com, 08_MH, 09_Trans, 10_PAR, 11_A&E, 12_UB, 13_Excl]) AND (([1 - Data MFF].[Dept code])=[Enter Department code])) ORDER BY Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0);
04 By Org, NCCI pot, Dept, Service and Currency	SELECT [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code] AS Expr1, [1 - Data MFF].[Service code], [1 - Data MFF].[Currency code], Sum(Round([MFFd Actual Cost],0)) AS [Actual cost], Sum(Round([MFFd Expected cost],0)) AS [Expected cost], Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0) AS [Cost variance], Round(Sum([MFFd Actual cost])/Sum([MFFd Expected cost])*100,2) AS RCI FROM [1 - Data MFF] GROUP BY [1 - Data MFF].[Org code], [1 - Data MFF].[Mapping pot], [1 - Data MFF].[Dept code], [1 - Data MFF].[Service code], [1 - Data MFF].[Currency code] HAVING ((([1 - Data MFF].[Org code])=[Enter Org code]) AND (([1 - Data MFF].[Mapping pot])=[Enter Mapping pot - 01_EI, 02_NEI, 04_CCS, 05_OP, 06_OAS, 07_Com, 08_MH, 09_Trans, 10_PAR, 11_A&E, 12_UB, 13_Excl]) AND (([1 - Data MFF].[Dept code])=[Enter Department code]) AND (([1 - Data MFF].[Service code])=[Enter service code])) ORDER BY Round(Sum([MFFd Expected cost]-[MFFd Actual cost]),0);
05 Unit Cost by Organisation, Department and Currency	SELECT [1 - Data].[Org code], [1 - Data].[Dept code] AS Expr2, [1 - Data].[Currency code], Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit Cost] FROM [1 - Data] GROUP BY [1 - Data].[Org code], [1 - Data].[Dept code], [1 - Data].[Currency code], [Enter Org code, Leave blank to show all], [Enter Department code, Leave blank to show all], [Enter Currency code, Leave blank to show all] HAVING ((([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])] Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((

Query name	SQL text – RCI-related queries				
	Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([1 - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Org code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) AND (([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([1 - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([1 - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([I - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) AND (([I - Data].[Dept code])=[Enter Currency Code, Leave blank to show all]) AND (([I - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([I - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([I - Data].[Currency code])=[Enter Currency Code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Not Null) AND (([Enter Currency code, Leave blank to show all]) I				
06 Unit Cost by Organisation and Department	SELECT [1 - Data].[Org code], [1 - Data].[Dept code] AS Expr2, Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Org code], [1 - Data].[Dept code], [Enter Org code, Leave blank to show all], [Enter Department code, Leave blank to show all] HAVING ((([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Org code])=[Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Org code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Department code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Org code, Leave blank to show all]) AND (([[Enter Department code, Leave blank to show all]) Is Not Null) AND (([Enter Department code, Leave blank to show all]) Is Not Null));				
07 Unit Cost by Organisation and Currency	SELECT [1 - Data].[Org code], [1 - Data].[Currency code], Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Org code], [1 - Data].[Currency code], [Enter Org code, Leave blank to show all], [Enter Currency code, Leave blank to show all] HAVING ((([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Org code])=[Enter Org code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) Is Null) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([I - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Org code, Leave blank to show all]) AND (([Enter Currency code])=[Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency				

Query name	SQL text – RCI-related queries
08 Unit Cost by Department and Currency	SELECT [1 - Data].[Dept code] AS Expr2, [1 - Data].[Currency code], Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Dept code], [1 - Data].[Currency code], [Enter Department code, Leave blank to show all], [Enter Currency code, Leave blank to show all] HAVING ((([Enter Department code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) Is Null) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Dept code])=[Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null)) AND (([Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Not Null));
09 Unit Cost by Organisation	SELECT [1 - Data].[Org Code], Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Org Code], [Enter Org Code, Leave blank to show all] HAVING ((([Enter Org Code, Leave blank to show all]) IS Null)) OR ((([1 - Data].[Org Code])=[Enter Org Code, Leave blank to show all]) AND (([Enter Org Code, Leave blank to show all]) IS Not Null));
10 Unit Cost by Department	SELECT [1 - Data].[Dept code] AS Expr2, Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Dept code], [Enter Department code, Leave blank to show all] HAVING ((([Enter Department code, Leave blank to show all]) IS Null)) OR ((([1 - Data].[Dept code])=[Enter Department code, Leave blank to show all]) AND (([Enter Department code, Leave blank to show all]) IS Null));
11 Unit Cost by Currency	SELECT [1 - Data].[Currency code], Sum([1 - Data].[Actual cost]) AS [SumOfActual cost], Sum([1 - Data].Activity) AS SumOfActivity, Sum([Actual Cost])/Sum([Activity]) AS [Unit cost] FROM [1 - Data] GROUP BY [1 - Data].[Currency code], [Enter Currency code, Leave blank to show all] HAVING ((([Enter Currency code, Leave blank to show all]) Is Null)) OR ((([1 - Data].[Currency code])=[Enter Currency code, Leave blank to show all]) AND (([Enter Currency code, Leave blank to show all]) Is Null));

Using the standard queries

NCCI queries

The standard queries are designed to allow organisations to drill into their data. Organisations may want to use them to highlight areas where they have substantial activity and where their costs are much higher or lower than the national average.

The NCCI standard queries all show actual cost, expected cost, cost variance (expected cost – actual cost) and NCCI. The cost variance is similar to the NCCI; however, it takes activity into account. The queries are sorted by cost variance – ascending.

The amount of detail shown increases with each standard query. The table below shows how the detail builds up.

Query	Org code	NCCI pot	Dept	Service	Currency
1 By Org and NCCI pot	\checkmark	\checkmark			
2 By Org, NCCI pot and Dept	\checkmark	\checkmark	\checkmark		
3 By Org, NCCI pot, Dept and Service	\checkmark	\checkmark	\checkmark	\checkmark	
4 By Org, NCCI pot, Dept, Service and Currency	\checkmark	~	\checkmark	~	\checkmark

The standard queries require some of the variables to be selected from the selection boxes triggered after running the query, eg the '1 By Org and NCCI pot' query requires org code to be selected. These pre-selected fields are shaded in the table.

Once the query has been set up, it can be run by double clicking it. A new window(s) will appear. Enter the information required and click 'OK'.

Enter Parameter Valu	Je 🕜 💌
Enter Org Code	
1	
ОК	Cancel

Unit cost queries

The unit cost standard queries are designed to allow organisations to compare unit cost for activity defined by organisation code, department code, currency code or any combination of these fields.

Unlike the NCCI standard queries, unit cost queries do not require the input of an organisation code. However, the queries give the option to select a specific organisation, department or currency, or a combination of these three. If you do not wish to make a selection, leave the 'Enter Parameter Value' window blank.

3: Source data

We have provided the source data in CSV files alongside this publication. These should be downloaded from the <u>National Cost Collection page</u> on the NHS Improvement website and saved locally.

Table 8: CSV files

CSV file name	Contents	Zip file name
1 - Data/ 1 - Data MFF	Organisation-level data	Organisation level source data part 1 and Organisation level source data part 2
2 Organisation description	Data provider code, name and MFF value	Organisation level source data part 3
3 Department description	Department code and name	Organisation level source data part 3
4 Service description	Service code and name	Organisation level source data part 3
5 Currency description	Currency code and name	Organisation level source data part 3
6 Units	Activity unit for all department/service/currency combinations	Organisation level source data part 3
7 Mapping pots	For calculating service-level RCIs	Organisation level source data part 3
8 Mapping pots description	Mapping pot name	Organisation level source data part 3
9 Memorandum data	Organisation-level memorandum data	Organisation level source data part 3
10 Memorandum units	Activity unit for memorandum data	Organisation level source data part 3
11 Mental healthcare cluster memorandum data	Memorandum information collected for mental healthcare clusters	Organisation level source data part 3

CSV file name	Contents	Zip file name
12 Mental health IAPT memorandum data	Memorandum information collected for IAPT mental healthcare clusters	Organisation level source data part 3
13 Secure mental health memorandum data	Memorandum information collected for secure mental healthcare clusters	Organisation level source data part 3
14 National cost collection UZ01Z data	FCE data collected which is invalid for grouping	Organisation level source data part 3
15 Unmatched imaging and pathology data	Imaging and pathology that couldn't be accurately matched	Organisation level source data part 3
16 Homecare high cost drugs data	High cost drugs delivered in the home setting	Organisation level source data part 3
17 Data for excluded providers	Raw data for the organisation data that was excluded from the national cost collection due to data quality issues	Organisation level source data part 3

Tables 9 to 22 describe the contents of each CSV file:

Table 9: 1 - Data/1 - Data MFF (Field names will be preceded by MFF Data names)

Field name	Description
Org code	Organisation code
Department code	Department code (eg EL)
Service code	Service code (eg 100)
Currency code ¹	Currency code (eg AA02A)
Unit cost (MFFd Unit Cost)	Average cost to the organisation of providing the activity
Activity	See '6 Units' below for details
Bed days	Number of inlier bed days
Mean (MFFd Mean)	National mean average unit cost
Actual cost (MFFd Actual cost)	Organisation's activity × organisation's unit cost

¹ HRG UZ01Z is not included in this dataset but is available in the 14 Reference costs UZ01Z data CSV file.

Expected cost (MFFd Expected cost)	Organisation's activity × national mean unit cost
Mapping pot ²	Maps all activity to one of 13 groups for the purpose of calculating service-level RCIs

² Cystic fibrosis data, improving access to psychological therapies (IAPT) data and secure mental health services data are not included in the published RCI calculation. They are allocated to the 13_Excl pot.

Table 10: 2 Organisation description

Field name	Description
Org code	Organisation code
Organisation name	Organisation name
Org type	Trust type: acute, ambulance, mental health or community
Underlying MFF	MFF for the organisation, used for calculating RCIs
Rebased MFF	Underlying MFF for own data, scaled to ensure that adjustment is cost neutral (nationally) when applied to the data. This is the MFF used to adjust and produce RCIs

Table 11: 3 Department description

Field name	Description
Department code	Department code (eg EL)
Department name	Department name (eg Elective inpatient)

Table 12: 4 Service description

Field name	Description
Service code	Service code (eg 100)
Service name	Service name (eg General surgery)

Table 13: 5 Currency description

Field name	Description
Currency code	Currency code (eg AA22C)
Currency name	Currency name (eg Cerebrovascular Accident, Nervous System Infections or Encephalopathy, with CC Score 14+)

Table 14: 6 Units

Field name	Description
Department code	Department code (eg EL)
Service code ³	Service code (eg 100)
Currency code ⁴	Currency code (eg AA22C)
Units	Eg FCE

Table 15: 7 Mapping pots

Field name	Description
Department code	Department code (eg EL)
Service code	Service code (eg 100)
Mapping pot	Mapping pot (eg 01_EI)

Table 16: 8 Mapping pots description

Field name	Description
Mapping pot	Mapping pot (eg 01_EI)
Mapping pot name	Mapping pot description (eg elective inpatient and day case)

Table 17: 9 Memorandum data

Field name	Description
Org code	Organisation code
Supplier type	Supplier type
Department code	Department code
Service code	Service code
Currency code	Currency code
Memo	See "10 Memorandum units" for details

³ Where the fields are blank, this indicates that the units of measurement are the same regardless of the service code

⁴ Where the fields are blank, this indicates that the units of measurement are the same regardless of the currency code

Table 18:10 Memorandum units

Field name	Description
Department code	Department code
Units	 Depending on the department code, the unit is either: (CC) the number of critical care periods, collected in addition to the number of critical care bed days for adult critical care (DA) the number of requests, collected in addition to the number of tests for directly accessed pathology services (RENALCKD) the average number of sessions per week per patient of home haemodialysis, collected in addition to the number of sessions for haemodialysis

Table 19: 11 Mental healthcare cluster memorandum data

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Org code

Department code

Service code

Currency code

Unit cost per occupied bed day

Cluster days in admitted patient care

Unit cost per non-admitted patient cluster day

Cluster days in non-admitted patient care

Average review period (days)

Total number of completed cluster review periods

Table 20: 12 Mental Health IAPT memorandum data

Field Name

Org code

Department code

Service code

Currency code

Number of high intensity contacts

Number of low intensity contacts

Total number of cluster days

Table 21: 13 Secure mental health memorandum data

Field name
Org code
Department code
Service code
Currency code

No service users

Table 22: 14 Reference costs UZ01Z data

Field name	Description
Org code	Organisation code
Department code	Department code (eg EL)
Service code	Service code (eg 100)
HRG code	Currency code (UZ01Z)
Unit cost	Average cost of data invalid for grouping
Activity	Data invalid for grouping
Inlier bed days	Inlier bed days

Field name	Description
Org code	Organisation code
Dept code	Department code
Service code	Service code (eg 100)
Currency code	Currency code (eg RD01A)
Activity	Count of activity
Total cost	Total cost for the row of data

Table 24: 16 Homecare high cost drugs data

Field name	Description
Org code	Organisation code
Dept code	Department code (HCD)
Service code	Service code (HC)
Currency code	Currency code (eg HICD001)
Activity	Count of activity
Total cost	Total cost for the row of data

Table 25: 17 Data for excluded providers

Field name	Description
Org code	Organisation code
Dept code	Department code
Service code	Service code
Currency code	Currency code
Activity	Count of activity

Total	cost
TULA	CUSI

Total cost for the row of data